

The Ruth H. Hooker Research Library

and Technical Information Center



NRL Library Gives Researchers Desktop Access to CD-ROMs, Internet Databases via InfoNet

[The following article is a condensation of a paper presented by Laurie E. Stackpole and Roderick D. Atkinson of the Naval Research Laboratory at the Military Librarians Workshop in Mystic, CT, October 27-30, 1992]

The Ruth H. Hooker Research Library and Technical Information Center meets the information needs of Naval Research Laboratory's (NRL) research community, consisting of about 3,500 Federal staff and about 1,200 contractors. Since 1983, end users have been able to search the Library's online catalog both on site and remotely over the campus-wide network, known as NICE net. However, all other online searching continued to be performed by library reference staff, primarily using DIALOG, STN and DTIC. This situation began to change in 1988 when the Library introduced CD-ROM databases for end-user searching in both its reference area and its Microcomputer Software Support Center. Users responded favorably to the CD-ROM products, enjoying the freedom to explore that comes with performing their own searches.

To extend such search capabilities to users in their offices, in August 1992 the Library implemented a campus-wide information system called the InfoNet. The InfoNet has replaced the old method of searching CD-ROM databases, with disks located at individual workstations in the Library and searchable by only one walk-in user at a time. InfoNet mounts multiple CD-ROM products and allows for access by many simultaneous users both in the Library and over the campus network. Users are able to search CD ROMs over NICE net from their offices and laboratories. Among the CD-ROM databases that the Library currently offers on the InfoNet are: Applied Science and Technology Index, Computer Select, IEEE Inspec and ISI Science Citation Index.

The InfoNet provides menu access to a variety of other information sources as well. These include the Library's online catalog; other Laboratory information sources, such as the telephone locator and procurement status information, and remote services resident on the Internet, such as the University of Maryland Library Catalog and OCLC FirstSearch. All access to local and remote systems is preprogrammed, so users select the desired service from the InfoNet menu and are automatically logged in and ready to search.

To accomplish the goal of delivering information directly to the users' desktops, the Library and its contractor, Kestrel Associates Incorporated, had to deal with three basic issues. The first of these was the MS-DOS operating system adopted by most commercial CD-ROM publishers. The second was the wide variety of equipment in use at NRL, including: hundreds of dumb terminals that provide access to the Laboratory's mainframe computers, a SMTP and DECnet E-Mail system and administrative files; a few thousand PC-compatible and Macintosh computers, in heavy use in both research and administrative areas; and a large number of VAX, SUN and other UNIX workstations used by researchers. The third was the need to provide gateways to remote information utilities, both at NRL and throughout the world, running on a variety of systems.

The InfoNet was brought online in three distinct phases:

Phase I:

Implementation of a library LAN with networked CD-ROM databases and office productivity software, e.g., word processing, local E-Mail, database management, etc. for PCs and Macintosh microcomputers;

Phase II:

Integration of the library LAN with the campus-wide network to provide NRL with network access to CD-ROM databases independent of computing platform, provide staff with Internet E-Mail, and make campus-wide and Internet information resources and databases accessible from within the library under a single menu

driven system;

Phase III:

Providing the campus-wide network with a menu driven system which includes: MS- DOS based CD-ROMs, library information databases running under SUN UNIX (i.e., the library's Online Public Access Catalog and its Research Reports Catalog), DEC VMS based Management Information Databases run by NRL's Management Information Systems staff, and information resources and databases accessed on the Internet.

The InfoNet became fully operational in August of 1992. It can be accessed from anywhere on NRL's campus-wide network, regardless of computing workstation or terminal capabilities. Use is roughly 500 searches per week, divided about equally between local information resources and Internet use. InfoNet was developed using only off-the-shelf PC hardware and software, with a few minor software modifications.

To provide enhanced access to Internet information resources and databases, the InfoNet makes extensive use of state-of-the-art "Knowbot" (Knowledge Robot) prototypes, such as Gopher. Writing in Data Communications in September 1992, J.T. Johnson, in an article called "NREN: Turning the Clock Ahead on Tomorrow's Networks," described Knowbots as "programs that, once activated, wander through the [Internet] looking for information and [return] it to their electronic masters." The Knowbot prototypes query unrelated host systems and display the information to the end-user in a standard and familiar format. By separating the client search software from the database host, end-users are no longer required to learn the interfaces of unrelated systems. These programs are continuously updated and help to tame the Internet. In so doing, they have made world-wide information systems increasingly accessible.



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